

**Follow-up Audit
Solid Waste Management
and Illegal Dumping**

April 2000

City Auditor's Office

City of Kansas City, Missouri

April 5, 2000

Honorable Mayor and Members of the City Council:

This follow-up audit of the city's solid waste management and efforts to address illegal dumping was initiated in accordance with the City Auditor's Office policy of assessing the progress made to address audit recommendations.

Our 1996 audit found that illegal dumping was a problem citywide. After the state banned certain materials from landfills, the city had stopped routinely collecting appliances, lead-acid batteries, tires, and yard waste. The lack of legal options for disposing of these materials had increased incentives for disposing of the material illegally. We found that city efforts to address the problem were inadequate. We also found that although city code included a waste hauler permit, the city was not enforcing the ordinance or requiring permits. We recommended the city develop a comprehensive approach to waste management, enforce the existing hauler permit ordinance, develop an enforcement program, standardize language about solid waste in city contracts, and consider implementing a bulky item pick-up fee.

Since the original audit, the city increased efforts to prosecute illegal dumpers. From the summer of 1998 through December 31, 1999, the city has successfully prosecuted 11 cases of illegal dumping. Some of this success is attributable to the hiring of two investigators responsible for following up on calls to the illegal dumping hot line.

The city also provides alternatives for waste that was banned from landfills. The city collects yard waste and appliances, and accepts household hazardous waste and tires at drop-off sites. This reduces incentives to dispose of these materials illegally.

Despite these efforts, illegal dumping continues to be a problem in Kansas City. The city does not collect refuse from businesses; our observations indicate that much of the debris in illegal dumpsites appears to have been dumped by businesses. Despite the existence of an ordinance to regulate waste haulers, the city has chosen not to do so. Licensing such businesses could reduce illegal dumping in the city.

To help the city address illegal dumping:

- The city manager should appoint a broad-based committee to consider how the city should regulate businesses that transport and dispose of waste.
- The director of environmental management should register waste tire haulers as provided for by Ordinance 960041.

- The director of environmental management should ensure the illegal dumpsite inventory is periodically updated.

The draft follow-up report was sent to the city manager and director of environmental management on March 3. Their written responses are included as appendices. We appreciate the courtesy and cooperation extended to us during this project by staff in the Environmental Management, Parks and Recreation, and Public Works departments. The auditor in charge of this project was Michael Eglinski.

Mark Funkhouser
City Auditor

Follow-up Audit: Solid Waste Management and Illegal Dumping

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Introduction

Objectives

This follow-up audit of the city's solid waste management and efforts to address illegal dumping was conducted pursuant to Article II, Section 13 of the Charter of Kansas City, Missouri, which establishes the Office of the City Auditor and outlines the city auditor's primary duties.

A performance audit is an objective, systematic examination of evidence to independently assess the performance of a government organization, program, activity, or function in order to provide information to improve public accountability and facilitate decision-making.¹ A follow-up audit examines the actions an agency has taken in response to the findings and recommendations in a previous audit.

This audit was designed to answer the following questions:

- What steps has the city taken to address illegal dumping?
- Is illegal dumping still a problem in Kansas City?
- Does the city regulate the waste hauling industry? Should it?

Scope and Methodology

The follow-up audit was designed to determine the progress made in addressing findings and recommendations from the August 1996 performance audit of solid waste management and illegal dumping.

We conducted this audit in accordance with generally accepted government auditing standards, with the exception of the completion of an external quality control review of the office within the last three years.²

Our methods included:

¹ Comptroller General of the United States, *Government Auditing Standards* (Washington, DC: U.S. Government Printing Office, 1994), p. 14.

² The last review was in April 1995. A peer review is planned for the current year.

- Interviewing staff in the Environmental Management, Public Works, and Parks and Recreation departments.
- Reviewing documents provided by Environmental Management.
- Reviewing the August 1996 audit report and Audit Report Tracking System reports.
- Reviewing a 1998 council memo from the city auditor on illegal dumping control.
- Reviewing the city code, state statutes, and state regulations.
- Visiting illegal dumpsites located throughout the city.

No information was omitted from this report because it was deemed privileged or confidential.

Background

Illegal dumping increases health risks, decreases property values, and costs money to clean up. Dumping also impedes economic development and decreases the quality of life for citizens. The waste materials and run-off from dumps can be dangerous. Dumps are associated with vermin that may carry diseases. Dumps can catch fire or prevent proper storm drainage. The problems associated with dumps can decrease property values. Finally, the city and individual property owners bear significant costs to clean up materials that were illegally dumped.

Dumping waste without the permission of the landowner or on public property is prohibited by city code.³ Owners of private property are responsible for removing illegally dumped waste. The code allows the city, after providing notice, to remove waste from private property and charge the owner for the cost of removal.

Environmental Management is primarily responsible for solid waste management, including addressing illegal dumping. Prior to 1997, Public Works held those responsibilities.

³ Code of Ordinances, Kansas City, Missouri, Sections 62-89 and 62-93.

Summary of 1996 Performance Audit

The 1996 performance audit found that illegal dumping was a problem citywide, efforts to address illegal dumping were inadequate, a comprehensive waste management program was needed, and funding for solid waste collection needed to be reevaluated.

We made a number of recommendations intended to reduce illegal dumping. We recommended the city develop a comprehensive approach to waste management, enforce the existing hauler permit ordinance, develop an enforcement program, standardize language about solid waste in city contracts, and consider implementing a bulky item pick up fee.

Appendix A lists the recommendations from the 1996 audit. Audit Report Tracking System reports submitted by management are in Appendix B.

Findings and Recommendations

Summary

The city has increased efforts to address illegal dumping since our original audit in August 1996. Environmental Management now has investigators who follow up on complaints and develop cases against suspected illegal dumpers. Through December 31, 1999, the city has prosecuted 11 cases and won convictions in all of these cases. The city has developed programs to address residential yard waste, household hazardous waste, and waste tires. The Environmental Management, Public Works, and Parks and Recreation departments continue to collect waste from illegal dumps.

Despite city efforts, illegal dumps remain throughout the city. These sites decrease property values, cost residents and the city money to clean up, and can increase health risks. Environmental Management collected information about illegal dumping throughout the city, but complete information has not been maintained. Much of the waste in illegal dumps is yard waste and brush, construction and demolition debris, and waste tires. These materials are probably dumped by businesses. Businesses can avoid the cost of proper disposal by illegally dumping.

The city could reduce illegal dumping by enforcing existing ordinances and developing a program to regulate the businesses most likely to illegally dispose of waste. The city currently has ordinances that require permits for many commercial waste haulers and for waste tire haulers. Environmental Management does not issue these permits. It is in the public interest to regulate businesses that have incentives to illegally dump waste. A program to license such businesses could reduce illegal dumping in Kansas City.

City Increased Enforcement and Collection of Solid Waste

The city increased efforts to prosecute illegal dumpers and has begun to collect types of waste that were banned from landfills in the early 1990s. The Environmental Management Department hired investigators to

follow-up on complaints and develop cases against suspected illegal dumpers. From the summer of 1998 through December 31, 1999, the city prosecuted 11 cases and won convictions in all of these cases. The city has developed programs to address residential yard waste, household hazardous waste, and waste tires. Environmental Management, Public Works, and Parks and Recreation continue to collect waste from illegal dumps.

City Investigators Focus on Illegal Dumping

Environmental Management hired two legal investigators in the summer of 1998. The investigators are primarily responsible for illegal dumping investigations and prosecutions. In the original audit, we recommended the department develop an enforcement program to investigate, abate, and prosecute illegal dumping. Dedicating staff to enforcement and prosecution contributes to preventing illegal dumping.⁴

The investigators follow up on calls to the “illegal dumping hot line.” Environmental Management maintains the hot line and takes calls from people who are reporting suspected illegal dumping. The investigators log and follow up on the calls. The investigators have police backgrounds and have taken a course on advanced environmental investigation through the Federal Law Enforcement Training Center.

Since the investigators were hired, the city has prosecuted 11 cases and won all of them.⁵ In addition the city accepted three civil court settlements and referred eight cases to the Missouri Department of Natural Resources or the United States Environmental Protection Agency.

City Collects Residential Yard Waste, Household Hazardous Waste, and Waste Tires

The city now provides alternatives for residential wastes that were banned from landfills. In 1991, 1992, and 1994, the state banned appliances, waste oil, lead-acid batteries, whole tires, yard waste, and household hazardous waste from Missouri landfills. When these materials were first banned, the city stopped routinely collecting them. These materials accounted for about 16 percent of the residential waste stream. In the original audit, we noted that eliminating disposal options increased incentives to illegally dispose of waste.

⁴ *Illegal Dumping Prevention Guidebook*, U.S. EPA Region 5, March 1998, p. 25.

⁵ Prosecution Summary, through December 31, 1999, Environmental Management Department.

- Regular curbside yard waste collection began in the fall of 1995. The city provides residential yard waste collection two times a year. In addition, the city operates drop-off sites that accept residential yard waste year-round.
- A household hazardous waste facility opened in August 1997. Residents may drop off hazardous waste free of charge. The program includes weekly outreach events from April through November, and involves cooperation with 25 neighboring jurisdictions.
- The city began accepting waste tires in 1998. Waste tires must be dropped off and, beginning in May 1999, residents must pay a fee for the service.
- Large appliances are accepted in the city's residential bulky-item pick-up service.
- The "Clean Sweep" program, which began in 1996, also provides collection of tires, yard waste, household hazardous waste, and appliances.

These alternatives should reduce incentives for residents to illegally dispose of yard waste, appliances, household hazardous waste, and tires. A lack of convenient alternatives to dispose of wastes banned from landfills is associated with illegal dumping. However, these efforts only address residential waste.

The City Does Not Collect Most Waste Generated in Kansas City

Most of the solid waste in Kansas City is generated by commercial and institutional operations and is not collected by the city. About 70 percent of the waste generated in the city is from commercial and institutional sources. The city only collects waste from residents and has not provided any collection from commercial and institutional operations since 1970.⁶

Commercial and institutional properties must contract for waste collection or haul waste themselves. The Code of Ordinances requires that commercial and institutional properties properly store waste and provide for collection and disposal of waste. The city does not collect commercial waste and does not accept commercial waste at drop-off sites.

⁶ The city stopped providing commercial garbage collection on July 1, 1970.

Environmental Management, Public Works, and Parks and Recreation Continue to Clean Dumps

Environmental Management, Public Works, and Parks and Recreation continue to expend resources to clean dumps. In addition to providing for regular residential collection and bulky item pick-up services, staff in Environmental Management's solid waste division clean up some illegal dumps. Street maintenance crews in the Public Works Department remove obstructions – including illegally dumped waste – from city streets. Parks maintenance staff remove dumped waste from Parks and Recreation properties.

Despite City Efforts, Illegal Dumping Remains a Problem in Kansas City

Despite city efforts, illegal dumps remain throughout the city. These sites decrease property values, cost residents and the city money to clean up, and can increase health risks. Environmental Management collected information about illegal dumping throughout the city, but the information has not been maintained. Much of the waste in illegal dumps is yard waste and brush, construction and demolition debris, and waste tires. Businesses probably dumped much of this waste. Businesses can avoid the cost of proper disposal by illegally dumping.

Illegal Dumps Are Located Throughout the City

There are active illegal dumps located throughout Kansas City. Environmental Management has 154 sites included in a list of active sites. (See Exhibit 1.) Most of the sites are north of 63rd Street and south of the Missouri River.

Exhibit 1. Status of Dumps as of November 1999

Condition of Site	Sites
Clear of debris	41
Light debris	45
Moderate debris	45
Heavy debris	12
No information on amount of debris	11
Active	154
Inactive	78
Total in inventory	232

Source: Environmental Management Department.

There was consensus among city staff we interviewed that illegal dumping is still a problem in the city. Staff from Environmental Management, Public Works, and Parks and Recreation told us that illegal dumping was still a problem.

Widespread dumps are a problem because of the negative effects associated with dumps. Illegal dumps are a public health risk, decrease surrounding property values, and are expensive to clean up. Illegal dumping is not currently considered a significant public health problem in Kansas City although it has the potential of becoming a problem. The Health Department has not identified any specific case or illness caused by illegal dumps. However, Health Department staff said efforts to eliminate illegal dumps are a worthwhile measure to control vector borne disease.

Environmental Management Should Update Dump Inventory

Environmental Management has not kept the inventory of dumpsites current. The supervisor of staff who monitor the sites said that they would like to maintain the data, but that it takes too much time to collect all the information.

Environmental Management procedures call for code enforcement officers to inspect each dumpsite bi-weekly and update information on the amount and type of debris at each site. Staff are also expected to identify illegal dumps that are not included in the inventory.

The Department of Environmental Management should update the dumpsite inventory information to help assess the nature of illegal dumping in Kansas City. The department's current procedure calls for the inventory to be updated bi-weekly; however, less frequent updates may be appropriate. If Environmental Management determines that the sites should be monitored less frequently, the procedures should be revised.

Businesses Are Responsible for Much of the Illegal Dumping

Much of the debris at illegal dumpsites appears to have been dumped by businesses. Some dumps include large amounts of yard waste and brush, construction and demolition debris, and waste tires. The amount and types of waste – yard waste, brush, and construction materials – suggest that businesses, rather than households, dumped much of the waste.

Follow-up Audit: Solid Waste Management and Illegal Dumping

Auditors visited a number of dumpsites and found business equipment, roofing materials, and construction debris. (See photos on the next page.)

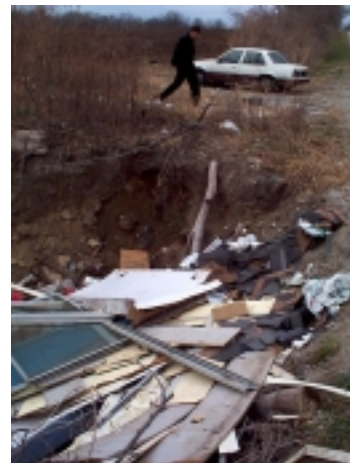
Businesses can save money by illegally disposing of waste. Proper disposal of waste generally requires transporting waste to a landfill and paying the landfill. Businesses that illegally dispose of waste avoid landfill fees, but their actions cost the city money, increase health risks, and decrease property values.

Business equipment was dumped at this site that also included brush and tires. The site is along a busy street, but hidden by vegetation. Several of the items had inventory labels from a hospital in Saint Louis.



Roofing materials, brush, and tires were dumped at this site. The site is near an exit ramp off an interstate highway.

Remodeling debris, tires, brush, dead animals, furniture, auto parts, and household trash were dumped in and around a ravine. The site is along a gravel road that runs through an undeveloped area.



Regulation Could Help; Staff Have Not Regulated Commercial Haulers

The city could reduce illegal dumping by enforcing existing ordinances and developing a program to regulate the businesses most likely to illegally dispose of waste. The city currently has ordinances that require permits for many commercial waste haulers and for waste tire haulers. The city does not issue these permits. It is in the public interest to regulate businesses that have incentives to illegally dump waste. A program to license such businesses could reduce illegal dumping in Kansas City.

City Not Issuing Permits in the Code

The city does not issue permits for waste haulers or registrations for waste tire haulers although the city code includes these provisions.⁷ Anyone in the business of collecting or processing refuse within Kansas City is required to obtain a permit. The permit fee, established over 25 years ago, is \$20 per year for each vehicle and establishment. Since 1996, people who haul five or more tires per load are generally required to register with the city. The annual registration fee is \$25. The city currently does not issue waste hauler permits and does not register waste tire haulers.

The city does not issue waste hauler permits. It is not clear whether the city ever issued these permits. In the 1996 audit, we recommended the city enforce the hauler permit requirement. The permit requirement was enacted in 1967 and amended in 1971.

In response to the 1996 audit recommendation, Environmental Management proposed a revised ordinance that would have required most businesses located within Kansas City that hauled waste to obtain a permit from the city. There would be no fee for the permit. Haulers would also have to provide customers with receipts and maintain collection and disposal records. The ordinance was presented to the City Council Neighborhood Development Committee and was held off the docket.

The city does not register waste tire haulers. Environmental Management does not currently register waste tire haulers. The current ordinance, which was approved by the voters in 1996, requires that people who haul waste tires obtain valid state waste tire hauling permits and register with the city. The director of environmental management is

⁷ Code of Ordinances, Kansas City, Missouri, Sections 62-5, 62-192, and 62-195.

responsible for administering and enforcing the city registration requirement.

Voters Approved Registering Waste Tire Haulers

The voters approved registration of waste tire haulers in August 1996. The ordinance the voters approved called for the city to regulate the transportation, storage and disposal of waste tires. It also established registration fees.

The voters were asked:

Shall the City of Kansas City, Missouri, in order to fund a program to encourage environmentally sound management of waste tires, impose an annual registration fee of \$75.00 for Waste Tire Sites, an annual registration of \$25.00 for Waste Tire Haulers, and a re-inspection fee of \$100.00 for the re-inspection of Waste Tire Sites...

Nearly 71 percent of the voters supported the proposition.

City Staff Generally Support Regulation

City staff we spoke to were generally supportive of the concept of regulating businesses that haul waste. While generally supportive, staff also expressed concerns with the difficulty and cost of administering a permit program. Environmental Management noted that the current ordinance exempts a large category of haulers from the current permit requirement.⁸ The department also raised concerns about how to fund a program to administer and enforce a permit requirement. The ordinance the department proposed for council consideration did not include a permit fee. In addition, the department noted that the city could not legally require permits for haulers that simply pass through the city.

Regulating Businesses Is in the Public Interest

Regulating businesses that are responsible for the materials found in illegal dumps is in the public interest. Improper handling of waste, such as illegal dumping, is a health risk. Illegal dumping adversely affects property values. The municipal government and individuals face substantial costs to clean up illegally dumped waste. Because improper

⁸ Code of Ordinances, Kansas City, Missouri, Section 62-11. This section exempts people hauling excavation materials, and construction and demolition debris from the hauler permit requirement in Section 62-5.

disposal imposes these risks and costs on the public, regulation is in the public interest.

Broad-Based Committee Should Study Regulation

To develop a regulation program, the city should consider the interests of a broad range of people. Among the interest groups are: residents, city staff, businesses that generate the types of waste commonly found in illegal dumps, and businesses involved in solid waste hauling. The interests of these groups will not always coincide.

In order to take these interests into account, while addressing the problem of illegal dumping, the city manager should appoint a broad-based committee. At a minimum, the committee should consider and make recommendations about:

- What type of businesses should be regulated and how should they be regulated?
- Should the city revise the existing ordinances that require certain haulers to have permits and waste tire haulers to register?

The Street Permit Task Force that Public Works formed in 1995, may be a good model of a process to address illegal dumping. (See text box on the next page.)

A Process to Take Different Interests Into Account

Public Works formed the Street Permit Task Force to address street closure and excavation permits. The task force included city staff and representatives of utilities and other businesses that work in the right of way. The task force was lead by staff from Public Works.

Public Works' efforts to address excavation and street closure permitting were noteworthy. The task force process was appropriate and inclusive.

The Street Permit Task force could be a useful model for addressing the regulation of hauling solid waste. We noted two important similarities:

- There are a number of groups whose interests, especially economic interests, may not coincide.
- The issues being addressed – illegal dumping and working in the right of way – directly affect specific segments of the business community.

We also noted two important differences:

- Dumping is illegal. Working in the right of way is not.
- Costs related to dumping are difficult to quantify. Costs related to excavations and street closures are easier to quantify.

Recommendations

1. The director of environmental management should ensure the illegal dumps site inventory is updated periodically.
2. The director of environmental management should register waste tire haulers as provided for in the Code of Ordinances.
3. The city manager should appoint a committee to make recommendations to the City Council on regulation of businesses that transport and dispose of waste.

Appendix A

Prior Audit Recommendations

Prior Audit Recommendations

1. The city manager should consolidate most waste management functions in one specific office. The Office of Environmental Management should be considered as a likely candidate. The mission of the Solid Waste Division should be redefined, with objectives and outcomes addressing its full range of responsibilities.
2. The city manager should develop a comprehensive, integrated program for solid waste management. Such a program should focus on regulation, information, and collection of both legally and illegally deposited refuse, and should rationally reallocate existing resources toward these elements.
3. The Public Works director⁹ should develop management information systems capable of providing quick access to reliable data necessary for effective decision-making and for citizens to be informed of the extent of the trash problem, what is being done about it, how they can help, and the penalties for being found guilty of illegally adding to the problem.
4. The Public Works director should enforce the waste hauling permit program required by the city code, section 62-5 by establishing a regulatory program, including permit fees.
5. The city manager should propose for City Council consideration an ordinance that restricts the private transfer of solid waste.
6. The Public Works director should develop a written code enforcement program, outlining code enforcement officer responsibilities that focus on illegal dumping investigation, abatement, and prosecution activities. The program should include performance measurements and detailed policies and procedures.
7. The city attorney should develop standard waste disposal language in city contracts for projects that generate a certain minimum amount of demolition waste to include clauses requiring contractors to submit landfill receipts or other evidence of proper disposal as a condition of approval for payment. Departments should install controls to ensure consistent enforcement of contract requirements regarding demolition waste disposal.

⁹ This recommendation may apply to Public Works, to the Office of Environmental Management, or to any other office that may be appropriate, depending on the disposition of recommendation number one.

8. The city manager should propose for City Council consideration an ordinance establishing a bulky item collection fee. Accompanying the proposal should be public information and business regulation measures designed to minimize tendencies toward increased illegal dumping. Because this ordinance would designate fees for services that had been previously provided at no fee, voter approval would probably be required.

Appendix B

Audit Report Tracking System (ARTS) Reports

Appendix C

Director of Environmental Management's Response

Appendix D

City Manager's Response

